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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,340	09/04/2003	Grigori Lishanski	423.008	6105

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EXAMINER	
WEINSTEIN, LEONARD J	
ART UNIT	**PAPER NUMBER**
3746	

NOTIFICATION DATE	DELIVERY MODE
12/31/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@boylefred.com

Office Action Summary	Application No.	Applicant(s)	
	10/655,340	LISHANSKI ET AL.	
	Examiner	Art Unit	
	Leonard J. Weinstein	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment of May 21, 2007. In making the below rejections and/or objections the examiner has considered and addressed each of the applicant's arguments.

2. The examiner acknowledges the amendments made to claims 1, 17, and 20.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 11, 13-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Silvenis et al. 5,150,841. Silvenis teaches all the limitations as claimed for a vibratory pump including with the embodiment of the pumping mechanism 200 of figures 9-11 applied to the embodiment of figure 3 as substituted for element 91: (claim 1) a housing 13, a vibration generating mechanism 37 disposed within the housing 13, a pumping chamber 39 disposed within the housing 13 adjacent the vibration generating mechanism 37, the pumping chamber 39 including at least one fluid inlet 211 and a fluid outlet 213 each extending through the housing 13, by element 241 for element 211 and by element 61 for element 213, and a rod 205 operably connected to the vibration generating mechanism 37 at one end, via element 83, and positioned within the pumping chamber 39 at the opposite end, distal end of element 205 opposite element 83 and above element 207, the opposite end selectively engageable with the fluid outlet 213, via elements 207 and 217, during operation of the vibration generating

mechanism 37; (claim 2) a fluid outlet 213 includes an outlet chamber 63 having an inner end, as defined as portion of element 63 in communication with element 217, positioned within the housing 13, as element 217 is disposed within element 200 which is defined as integrally connected to and extending from element 13 (as exemplified by element 91 shown in figure 3 and substituted here by element 200), and including a central opening 61, and an outer end 65 extending outwardly from the housing 13, as shown in figure 3; (claim 3) a central opening 61 has a conical surface, as defined by element 51; (claim 4) a rod 205 includes a plate 207, as element 207 is integrally connected to element 205, opposite the vibration generating mechanism 37 that is matable with a central opening 61, as the portion of element 61 defined by element 217 having element 207 disposed therein and mating therewith (fig. 9); (claim 5) a plate 207 is formed of a resilient material, as defined as element 207 being a resilient diaphragm; (claim 6) an inner end, portion of element 200 left of element 39 and in communication with element 63 via element 217, includes a resilient diaphragm 221 positioned over the central opening 61, as defined by portion of element 61 defined by element 217 as it is in direct communication at a distal end with element 61 within element 63, the diaphragm 211 including a central aperture, as assumed by review of figure 11 in which a of fluid flows past element 221 within element 217 and element 221 is formed in the opening 217 and connected with elements 213 and 211 and therefore must have an aperture to permit flow as shown in figure 11; (claim 7) a rod 205 provided with a plate, portion of element 207 formed within the side of element 200 left of chamber element 39 and disposed within and over a lower portion of element 217, opposite the vibration generating mechanism 37 that is engageable with the central opening 61, via elements 217 and element 63 in communication with element 217; (claim 8) a plate, portion of element 207 formed within the side of element 200 left of chamber

element 39 and disposed within and over a lower portion of element 217, is positioned within the outlet end (not synonymous with outer end of outlet and is defined by elements 61, 63, 65, and 217 above element 207), as defined with portion of element 207 in the fluid path of element 217 within element 200 and between elements 217 and element 61; (claim 9) a plate, portion of element 207 formed within the side of element 200 left of chamber element 39 and disposed within and over a lower portion of element 217, provided with a central portion, portion of element 207 disposed in between a space defined above and below it by element 217, having a diameter less than the diameter of the central opening 61, portion of central opening defined by element 217 - specifically space defined by element 217 above and below element 207 before a connection with element 61 and within the side portion of element 200 that is left of element 39, having a diameter less than the diameter of the central opening, (portion of element 61 defined by element 217 being in direct communication and passing through element 63), as assumed by review of figure 11 in which element 207 is formed in the opening 217 and fixed in place by a housing or frame portion of element 200 and a fluid flows past element 207 within element 217 and therefore must have an aperture to permit flow as shown in figure 11, and an outer portion, portion of element 207 between frame/housing portion of element 200 holding element 207 in place, having a diameter greater than the diameter of the central opening portion 61, as defined by the portion of element 61 defined by element 217 in the space above and below 207 as the space above element 207 is in direct communication with element 61; (claim 10) a outer portion, portion of element 207 between frame/housing portion of element 200 holding element 207 in place, includes a sealing member, as defined by housing portion of element 200 surrounding element 217 and is immediate above and below element 207 and fixes element 207 in place, that is sealingly engageable with the

inner end, defined as the side of element 200 left of element 39, of the outlet chamber 63; (claim 11) a fluid inlet 211 includes at least one inlet tube 241 that extends outwardly from the housing 13, as element 241 extends directly from element 200; (claim 13) a fluid inlet 211 includes at least one fluid opening in the pumping chamber 39 aligned with the at least one inlet tube 241, as shown in figure 9; (claim 14) a housing 13 includes an engagement member 203 disposed on the housing 13 that is engageable with a fluid-holding container 201; (claim 15) an engagement 203 is threaded, as seen in figure 9; (claim 16) and a vibration generating mechanism 37 includes a switch 19 extending through the housing 13 (as in fig. 3).

Further interpreted as follows Silvenis teaches (claim 17) a housing 13, a vibration generating mechanism 37 disposed within the housing 13, a pumping chamber 39 disposed within the housing 13 adjacent the vibration generating mechanism 37, the pumping chamber 39 including a fluid inlet 211 and a fluid outlet 213, each extending through the housing 13, by element 241 for element 211 and by element 61 for element 213, a plunger, distal end of element 205 opposite the end of element 83 and above element 207, operably connected to the vibration generating mechanism 37 at one end, via element 83, and positioned within the pumping chamber 39 at the opposite end (fig. 9), the opposite end 209 selectively engageable with the fluid outlet 213 during operation of the vibration generating mechanism 37, wherein the outlet end 200 includes an outlet chamber 63 having an inner end, as defined by side of element 200 left of element 39 formed around element 217, positioned within the housing 13 spaced from the fluid inlet 211 and including a central opening 217, and an outer end 65 extending outwardly from the housing 13, and further wherein the pumping chamber 39 includes an inlet tube 241 that extends outwardly from the fluid inlet 211, as can be seen in figure 3; (claim 18) an inner end, as defined by side of element 200 left of element 39 and

surrounding element 217, of an outlet chamber 63 provided with a resilient gasket 221 positioned over a central opening 217, the gasket 221 including a central aperture, as assumed by review of figure 11 in which a fluid flows past element 221 within element 217 and element 221 is formed in the opening 217 and connected with elements 213 and 211 and therefore must have an aperture to permit flow as shown in figure 11; (claim 20) and an enclosure 13 having a fluid inlet 71, the fluid inlet 71 including an inlet tube 43 extending outwardly from the enclosure 13, and a fluid outlet 61 including an inner end 41 within the enclosure 13 and an outer end 65 extending through the enclosure 13, and a rod 81 connectable to a vibration generating mechanism 37 and including a plate 87 disposed within the chamber 39 that is engageable with the inner end 41 of the fluid outlet 61, via element 72.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silvenis et al. 5,150,841. Silvenis discloses the claimed invention except for an inlet tube 241 formed from of a generally resilient material. Although it is well known in the art to provide a flexible/resilient inlet tube for a dispensing apparatus, such as taught be Silvenis, additionally it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a flexible inlet tube in order to spray a liquid cleaner from a handheld liquid dispenser (Silvenis - col. 1 ll. 59-61). It has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

8. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Silvenis et al. 5,150,841 in view of Blackbourn et al. US 6,401,752. Silvenis teaches all the limitations as discussed including a plunger 209 having a plate 207 opposite a vibration generating mechanism 37 but fails to teach the following limitation that is taught by Blackbourn for a pump provided with a plunger having a plate 20 matable with a central aperture 18 in a resilient gasket 21. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a plunger disposed to reciprocate within an opening and mating with a gasket in order to provide a constant maximum flowrate that is not conditional upon the amount of fluid remaining in a container (Blackbourn – col. 1 ll. 33-36).

Response to Arguments

9. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are cited on form 892 herewith.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard J. Weinstein whose telephone number is (571) 272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Karmer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LJW

12/22/07